

Date: Tuesday, 29/04/2008 11:21:05 AM
 User: Melanie Fauteux

Process Sheet

OK

| | | | |
|-----------------------|--------------------------------------|------------------|------------------------------|
| Customer | : CC-DAR01 Dart Aerospace Ltd. | Drawing Name | : FRONT RAIL,RH |
| Job Number | : 38870 | | |
| Estimate Number | : 10804 | | |
| P.O. Number | : | Part Number | : D37662 |
| This Issue | : 29/04/2008 S.O. No. : | Drawing Number | : PROTOTYPE |
| Prsht Rev. | : NC | Project Number | : |
| First Issue | : 29/04/2008 Type : R & D SM/MED FAB | Drawing Revision | : A 08.04.30 |
| Previous Run | : 38866 | Material | : |
| Written By | : | Due Date | : 16/05/2008 Qty: 1 Um: Each |
| Checked & Approved By | : | | |
| Comment | : | | |

Additional Product

PROTOTYPE

Job Number:



| | | |
|---------|-----------------------|--------------|
| Seq. #: | Machine Or Operation: | Description: |
|---------|-----------------------|--------------|

| | | |
|-----|-------------|-------------------------------|
| 1.0 | SMALL FAB 1 | SMALL & MEDIUM FAB RESOURCE 1 |
|-----|-------------|-------------------------------|



Comment: SMALL & MEDIUM FAB RESOURCE 1

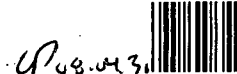
MAKE PER DRWG D3766 REV A

FF 08-05-15

| | | |
|-----|----------------|--------------------------|
| 2.0 | M304TR1000W155 | 304 RD Tube 1.0" x .155W |
|-----|----------------|--------------------------|



304 RD 1" x .188W



Comment: Qty.: 2.9300 f(s)/Unit Total: 2.9300 f(s)

m 107952

FF 08-05-15

| | | |
|-----|-----|------------------------------|
| 3.0 | QC5 | INSPECT WORK TO CURRENT STEP |
|-----|-----|------------------------------|



Comment: INSPECT WORK TO CURRENT STEP

ENGINEERING
APPROVAL

08/05/16 (40) / PJ 01.11521

| | | |
|-----|-------------|-----------------------|
| 4.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |
|-----|-------------|-----------------------|



Comment: PACKAGING RESOURCE #1

GIVE TO CHRIS P-ENG

FOR ENGINEERING USE ONLY

CHARGE TO JOB #00196

| | | |
|-----|------|------------------------------|
| 5.0 | QC21 | FINAL INSPECTION/W/O RELEASE |
|-----|------|------------------------------|



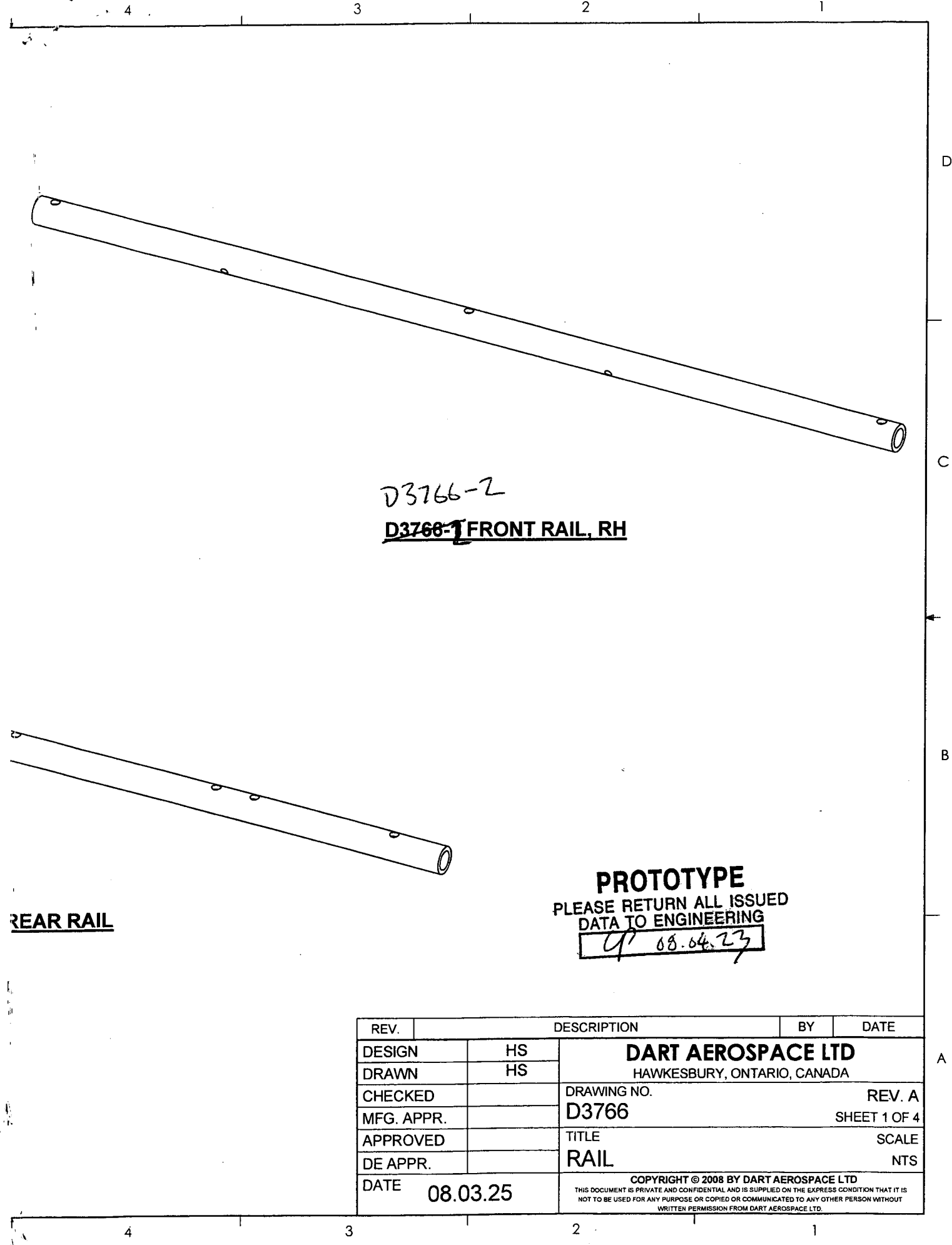
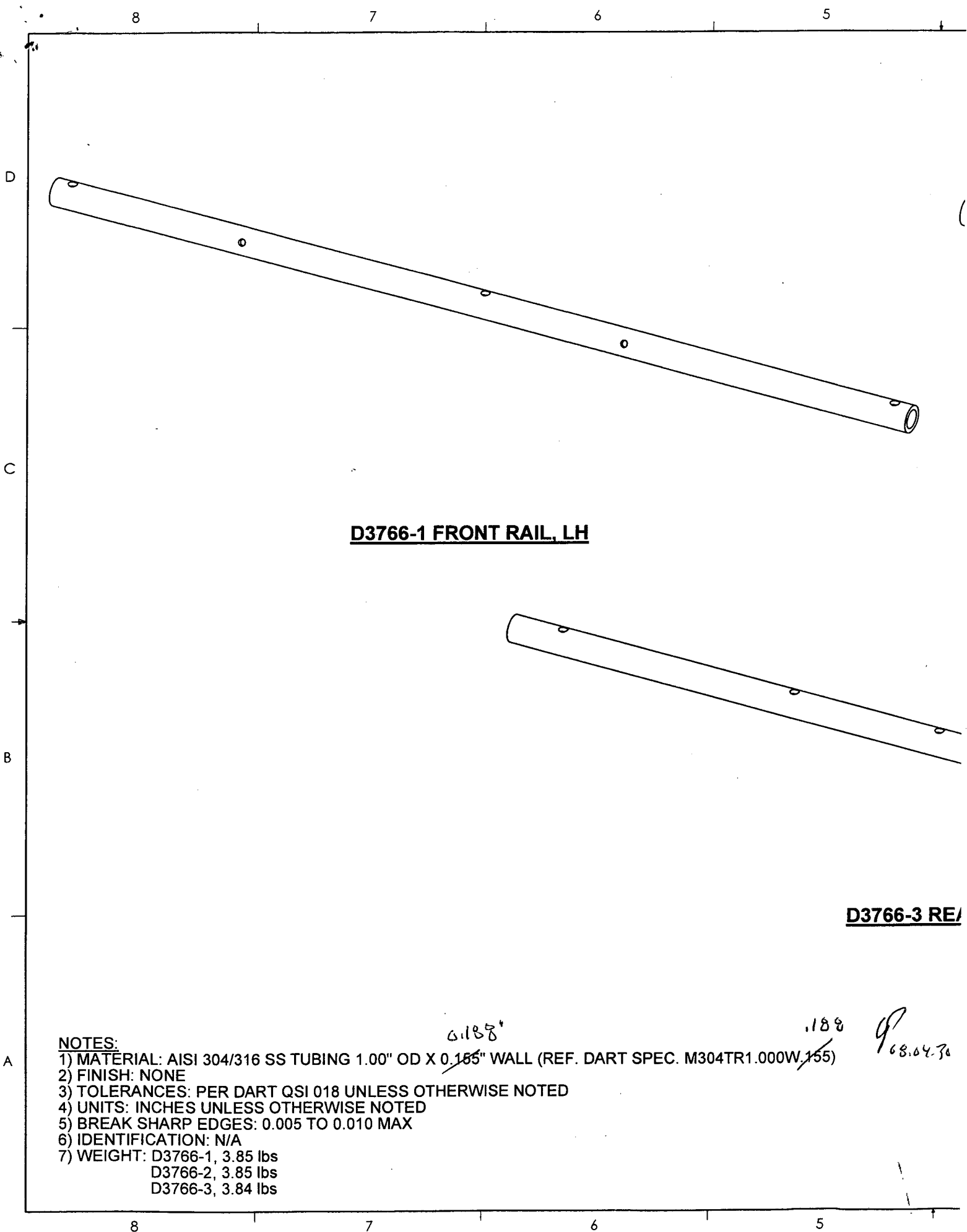
Comment: FINAL INSPECTION/W/O RELEASE

1A 08.05.29 Prototype

Job Completion



U 08.06.11



NOTES:

- 1) MATERIAL: AISI 304/316 SS TUBING 1.00" OD X 0.155" WALL (REF. DART SPEC. M304TR1.000W.155)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D3766-1, 3.85 lbs
D3766-2, 3.85 lbs
D3766-3, 3.84 lbs

PROTOTYPE
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING

08.04.23

| REV. | DESCRIPTION | | BY | DATE |
|------------|-------------|--|--|------|
| DESIGN | HS | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | | |
| DRAWN | HS | | | |
| CHECKED | | DRAWING NO. | REV. A | |
| MFG. APPR. | | D3766 | SHEET 1 OF 4 | |
| APPROVED | | TITLE | SCALE | |
| DE APPR. | | RAIL | NTS | |
| DATE | 08.03.25 | | <small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

8 7 6 5 4 3 2 1

D

C

B

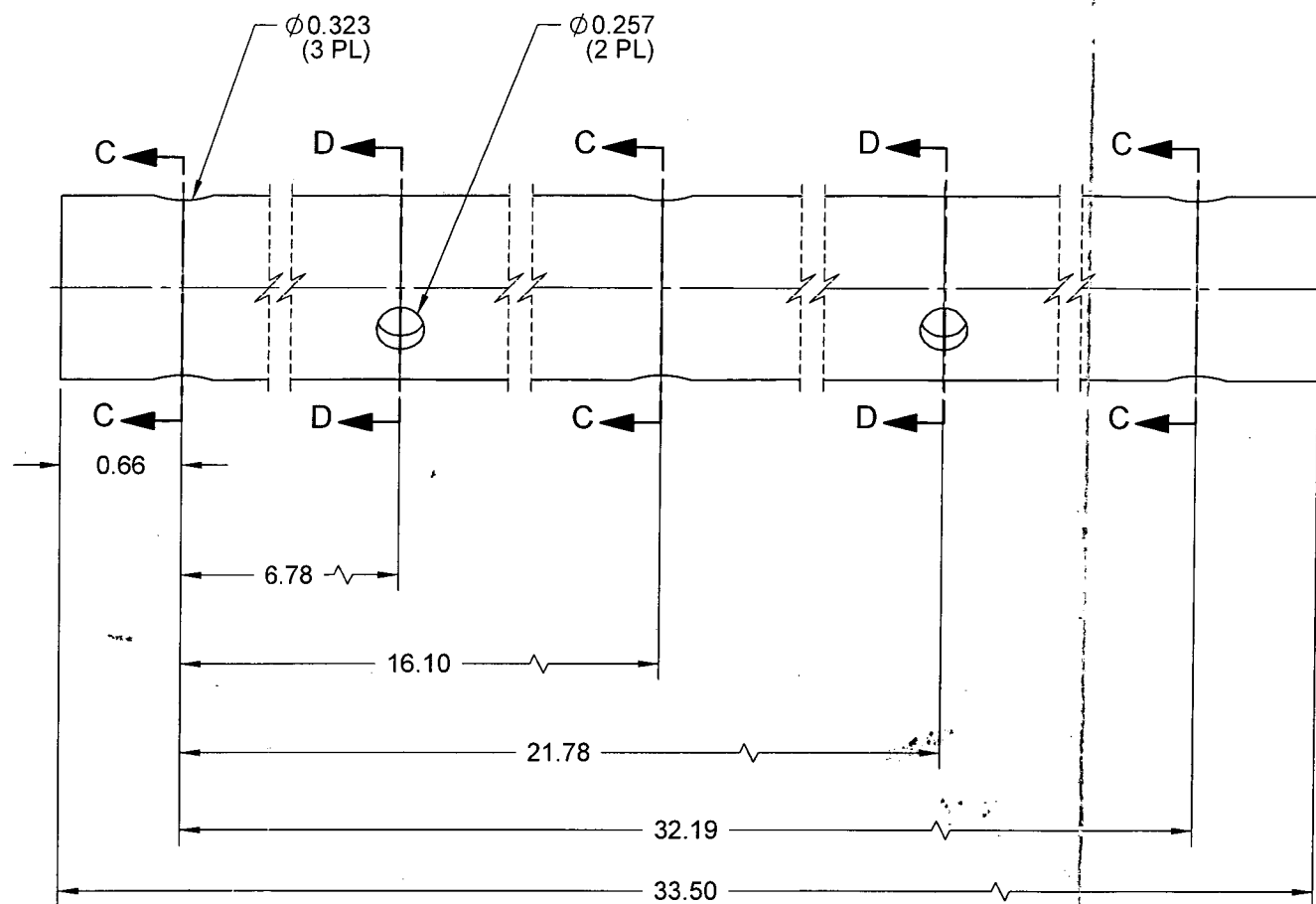
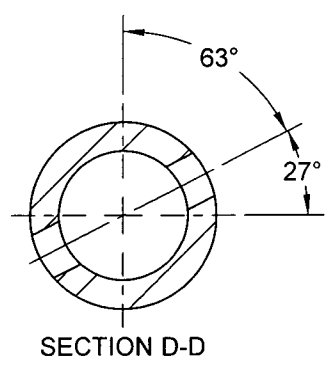
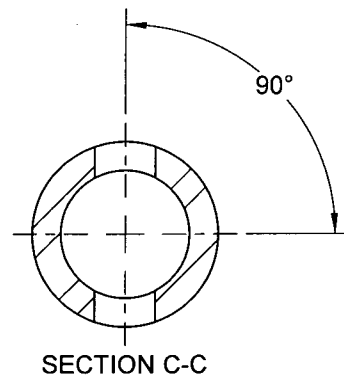
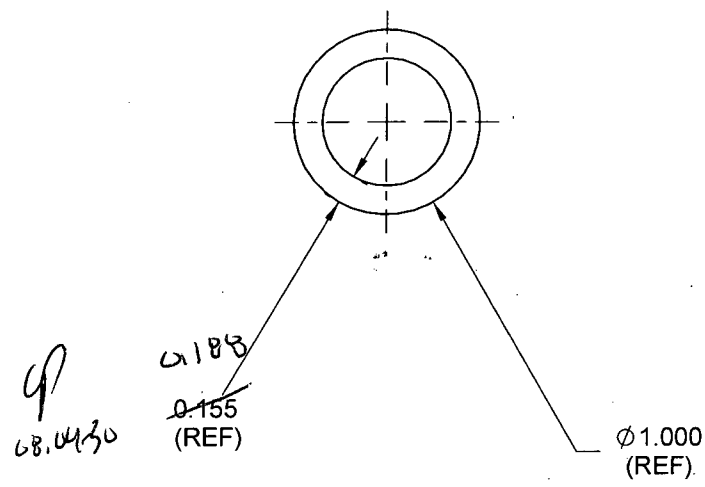
A

D

C

B

A



D3766-2 FRONT RAIL, RH

PROTOTYPE
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING
08.04.23

| | | | |
|------------|----------|---|--------------|
| DESIGN | HS | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | HS | | |
| CHECKED | | DRAWING NO. | REV. A |
| MFG. APPR. | | D3766 | SHEET 3 OF 4 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | RAIL | 1:1 |
| DATE | 08.03.25 | COPYRIGHT © 2008 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

8 7 6 5 4 3 2 1

| W/O: | | WORK ORDER CHANGES | | | | | |
|----------|------|--|----------------|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| 08.04.30 | Z | USE AISI 304/316 SS TUBING, 1.00" OD x 0.188" WALL DART SPEC. M304TR1.000W.188 INSTEAD OF 0.155" | FF 08/05/20 | → | ①2 | P 08.04.30 QSI/UTZ | 08.05.20 |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|----------|------|---|-----------------------------|--|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| 08/05/15 | #2 | one tube scrap. hole in wrong location RC. Hammer error | QSI/UTZ | Scrap and destroy and Replace Qty 1 (10) B# | | | QSI/UTZ | 08/05/15 |
| | | | QSI/UTZ | Plug hole with weld and | Pd 08/05/15 | 08/05/20 | QSI/UTZ | 08-05-20 |
| | | | | and Relocated in correct location | N/A | | QSI/UTZ | 08-05-20 |
| 08/05/20 | 2.0 | An aluminum plug was put in side the tubing to prevent weld coils, and the tubing cannot be removed. | QSI/UTZ | Scrap: destroy, Qty 1 Replace Qty 1 #107952 | FF 08/05/20 | 08/05/20 | QSI/UTZ | 08/05/20 |

NOTE: Date & initial all entries

... ..
... ..
... ..

Receiving Report

Date: 8/6/07
Supplier: MAGNA

Batch No: M107952
Dart P/O: 6270

Packing Slip: Yes ☒ No ☐
Invoice: Yes ☐ No ☒
Receipt: Cash ☐ Cr ☐

Release Note Attached: Yes ☒ No ☐ N/A ☐
Waybill Attached: Yes ☐ No ☒
Shipment Complete: Yes ☒ No ☐ N/A ☐
QC6 Inspection 2007/07/07 N/A ☐
Work Order ☐ N/A ☒

Discrepancies

| Part Number | Description | Quantity Ordered | Quantity Received | Quantity Returned | Quantity Short | Comments |
|-------------|-------------|------------------|-------------------|-------------------|----------------|----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |

Initials of receiver (if shipment OK) Level 12 [Signature]

Production/Admin: 08/05/08
Date: 08/05/08
Received/Costing: RCP 7826
Initial: CZ

Location

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

Heat # 168/12-3

RECEIVED MAY 13 2008

Sub-Total
G.S.T.

1090.00
54.50

TOTAL →

1144.50

FRAIS D'ADMINISTRATION DE 1½% PAR MOIS (18% PAR ANNÉE) SUR COMPTE PASSÉ DÙ.
LE PRÉSENT CONTRAT SERA RÉGI PAR LES LOIS DE LA PROVINCE DE QUÉBEC ET COMME
AYANT PRIS NAISSANCE DANS LE DISTRICT JUDICIAIRE DE MONTRÉAL.
ADMINISTRATION CHARGES OF 1½% PER MONTH (18% PER YEAR) ON OVERDUE ACCOUNTS.
THE PRESENT AGREEMENT SHOULD BE GOVERNED BY THE QUEBEC LEGISLATION AND SHOULD
BE CONSIDERED AS HAVING ORIGINATED IN THE JUDICIAL DISTRICT OF MONTRÉAL.

CG 826

6270



Shanghai Huaerde Stainless Steel Pipe Manufacture Co., Ltd.

Chihua Road, Shanghai Chemical Industry Park(Section B)

Fengxian District, Shanghai.201417 China

Mill Test Report

HED39569-04

According to EN10204 - 3.1

A PED& AD-W2 Certified Company



Certificate No. 01 200 01210 1247

| | | | |
|--------------------|---|------------------------|--|
| Customer Name | | Material Specification | ASTM A/SA-213 A269 NACE MR0175 TP316/316L OD 220 GRIT POLISHING |
| Purchase Order No. | 39569 | Heat Treatment | Solution Annealed in the temperature of 1040°C for 20 minutes and Quenched by water |
| Description | Cold Finished Seamless Austenitic Stainless Steel Tubes | Heat No. | 8-109 |

| ELEMENTS | C % | Mn % | P % | S % | Si % | Cr % | Ni % | Mo % | Lot No. | Yield Strength | Tensile Strength | Elongation | Hardness HRB |
|------------------|--------------|-------------|--------------|--------------|-------------|---------------|---------------|-------------|---------------|----------------|------------------|------------|-----------------|
| SPECIFICATION | Max 0.035 | Max 2.00 | Max 0.045 | Max 0.030 | Max 1.00 | 16.0 ~18.0 | 10.0 ~14.0 | 2.0 ~3.0 | 8-109 | Min.205MPa | Min.515 MPa | Min.35% | Max.90 |
| RESULTS(LADLE) | 0.018 | 1.34 | 0.005 | 0.024 | 0.40 | 16.40 | 10.14 | 2.13 | 07-10-15-88-1 | 245 | 539 | 46% | 77 |
| RESULTS(PRODUCT) | 0.020 | 1.25 | 0.005 | 0.013 | 0.51 | 16.47 | 10.13 | 2.17 | 07-10-15-88-2 | 247 | 543 | 48% | 81 |

C) Extend of material delivery

| Item No. | Quantity | Descriptions | Heat No. | Lot No. |
|----------|----------|--------------------|----------|-------------|
| 1 | 1120 ft | 1" x .049" x 20' | 8-109 | 07-10-15-88 |
| 2 | 1880 ft | 1" x .065" x 20' | 8-109 | 07-10-15-88 |
| 3 | 520 ft | 1" x .188" x 20' | 8-109 | 07-10-15-88 |
| 4 | 500 ft | 35mm x 2.5mm x 20' | 8-109 | 07-10-15-88 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

D) Hydrostatic Test, NDT and Dimensional check, etc.

| Testing Item | Details | Results |
|-------------------------------|------------|--------------|
| Dimensional / Visual | ASTMA999 | Satisfactory |
| Hydrostatic Pressure test | ASTMA999 | Satisfactory |
| Flattening Test | ASTMA1016 | Satisfactory |
| Flaring Test | ASTMA1016 | Satisfactory |
| Inter-granular Corrosion test | ASTMA262 E | Satisfactory |
| | | |
| | | |
| | | |
| | | |
| | | |

E) Steel Making Process

Electrical Furnace

F) Statement

1. No weld repair performed for billet and pipe
2. The Materials have been manufactured, tested and examined in acc. with all the requirements of the ordered standards and we confirm that all test results are acceptable

| | | | | | |
|------|-------------------|----------------|--------|------------------------|--|
| Date | November 24, 2007 | Mill inspector | Li Bin | Approved by QC manager | |
|------|-------------------|----------------|--------|------------------------|--|

